



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/568,976

10/17/2006

Maik Binas

1454.1676

8838

21171 7590 11/07/2008  
STAAS & HALSEY LLP  
SUITE 700  
1201 NEW YORK AVENUE, N.W.  
WASHINGTON, DC 20005

EXAMINER

FAHNERT, MARISOL

ART UNIT

PAPER NUMBER

4172

MAIL DATE

DELIVERY MODE

11/07/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/568,976	<b>Applicant(s)</b> BIENAS ET AL.	
	<b>Examiner</b> MARISOL FAHNERT	<b>Art Unit</b> 4172	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 February 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 19-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 19-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02/21/2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                        |                                                                   |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>2/21/2006</u> .                                               | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Specification***

#### ***Claim Rejection - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 31 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It states, “relevant transmission channels”, where it looks like should say, “available transmission channels”. There is not mention about “relevant transmission channels” on the specifications.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 19-36 are rejected under 35 USC 102 (b) as being anticipated by Mousley (US 6,907,015).

#### **Claim 19**

Mousley discloses a method for selecting a transmission channel for transmission and sending a message from a mobile terminal to a base station, comprising: initially sending from the mobile terminal a send authorization request signal for a specific transmission channel to the base station (column 3, lines 30-36); sending from the base station to the mobile terminal a response signal containing a first decision value, indicating whether the mobile terminal is authorized to send a message on the specific transmission channel (column 3, lines 46-50); if the first decision value indicates the mobile terminal is refused authorization to use the specific transmission channel and the mobile terminal is authorized to send a message on another transmission channel the response signal includes a second decision value (column 4, lines 40-46); the mobile terminal, upon detection that the first decision value in the response signal is

Art Unit: 4172

negative, analyzing the response signal to determine whether the second decision value is included in the response signal, indicating authorization of the mobile terminal to send a message on another transmission channel (column 2, lines 19-23), and which other transmission channels are available for use by the mobile terminal (column 4, lines 48-50 ); and sending the message by the mobile terminal to the base station on one of the transmission channels available (column 5, lines 55-57).

**Claim 20**

The transmission channel to be selected is one of a number of logical channels implemented by using different channelization codes on a physical transmission channel used jointly by a number of terminals for transfer of messages to the base station (column 1, lines 12-15).

**Claim 21**

The sending of the response signal includes encoding at least one of the second decision values and the channel status information (column 4, lines 40-44).

**Claim 22**

The sending of the response signal includes encoding at least one of the second decision value and the channel status information if included, so that the first decision value can be decoded unchanged by the mobile terminal, regardless of whether the second decision value is included in the response signal (column 5, lines 43-47).

**Claim 23**

A first set of signature character sequences is used for encoding the first decision value in the response signal and the encoding of at least one of the second decision value and the channel status information in the response signal uses at least one signature character sequence orthogonal to the first set of signature character sequences (column 5, lines 49-52, discloses two orthogonal sets of signatures: one and its inverses for decision values and the other and its inverses for channel status information.)

**Claim 24**

A method in accordance with claim 23, wherein the at least one signature character sequence used for encoding the at least one of the second positive decision value and the channel status information is created by multiplying each second character of a signature character sequence of the first signature character sequence set by -1 (Moulsley, Column 3, lines 11-29 defines a mutually orthogonal set of signature character sequences multiplying by -1 all the characters of the original sequence, which includes multiplying by -1 every other character.)

**Claim 25**

Art Unit: 4172

A method in accordance with claim 24, wherein said encoding of the at least one of the second decision value and the channel status information in the response signal uses a second set of signature character sequences, with each signature character sequence of the second signature character sequence set created from a corresponding signature character sequence of the first signature character sequence set by multiplying each second character by -1. (Moulsley, Column 3, lines 11-29 defines a mutually orthogonal set of signature character sequences multiplying by -1 all the characters of the original sequence, which includes multiplying by -1 every other character.).

**Claim 26**

The encoding of at least one of the second decision value and the channel status information in the response signal uses a character string encoded with a specific signature character sequence orthogonal to the first signature character sequence set to jointly transfer the second decision value with the channel status information (column 5, lines 43-52).

**Claim 27**

The specific signature character sequence is assigned to the base station (column 5, lines 43-52, discloses assigning to the base station a first set of signatures and their inverses for sending decision values and another set and its inverses for sending channel assignments.)

**Claim 28**

The first signature character sequence set is assigned to a specific transmission channel over which the mobile terminal has previously sent an access preamble to the base station, and wherein said encoding of the second decision value uses a specific signature character sequence orthogonal to the first signature character sequence set (column 5, lines 43-52).

**Claim 29**

The channel status information includes a third decision value for each occupied transmission channel indicating unavailability (column 4, lines 46-53, discloses a base station sending a mobile terminal a decision value with information about available channels. From this message, the mobile terminal may know what channels are unavailable.)

**Claim 30**

The sending of the response signal includes encoding each of the third decision values with the signature character sequences from the first set of signature character sequences assigned to the occupied transmission channels (column 4, lines 46-53, discloses a base station sending a mobile terminal a decision value with information about available channels. From this message, the mobile terminal may know what channels are unavailable.)

Art Unit: 4172

**Claim 31**

The sending of the response signal includes encoding each of the third decision values with signature character sequences of the second set of signature character sequences assigned to relevant transmission channels (column 4, lines 46-53, discloses a base station sending a mobile terminal a decision value with information about available channels.)

**Claim 32**

A method for selecting a transmission channel for transmission of messages from a mobile terminal to a base station, comprising: initially receiving at the base station of the mobile terminal a send authorization request signal for a specific transmission channel (column 3, lines 30-36); and sending from the base station to the mobile terminal a response signal containing a first decision value indicating whether the mobile terminal is authorized to send a message on the specific transmission channel (column 3, lines 46-50) and, if the first decision value indicates the mobile terminal is refused authorization to use the specific transmission channel and the mobile terminal is authorized to send a message on another transmission channel, the response signal includes a second decision value (column 4, lines 40-46).

**Claim 33**

A method for selecting a transmission channel and transmission of messages from a mobile terminal to a base station, comprising: initially sending from the mobile terminal to the base station an access preamble for a specific transmission channel (column 3, lines 30-36); receiving a response signal at the mobile terminal from the base station; detecting at the mobile terminal a first decision value in the response signal, indicating whether the mobile terminal is authorized to send a message on the specific transmission channel (column 3, lines 46-50); analyzing at the mobile terminal, upon detection that the first decision value indicates refusal of authorization for the mobile terminal to send the message on the specific transmission channel, the response signal to determine whether a second decision value therein indicates authorization for the mobile terminal to send the message on another transmission channel and which other transmission channels are available (column 4, lines 40-51); and sending the message by the mobile terminal to the base station on one of the transmission channels available (column 5, lines 55-57).

**Claim 34**

A base station with a transceiver unit and a processor unit for selecting a transmission channel for transmission of messages from a mobile terminal to the base station, comprising a decoding device detecting a send authorization request signal sent by the mobile terminal for a specific transmission channel (column 3, lines 34-36); a channel release unit determining which transmission channels are currently available for sending a message (column 4, lines 48-50);

Art Unit: 4172

and an encoding device generating a response signal to the mobile terminal containing a first decision value indicating whether the mobile terminal is authorized to send the message on the specific transmission channel (column 3, lines 46-50) and containing a second decision value when the first decision value indicates refusal of authorization for the mobile terminal to send the message on the specific transmission channel and the mobile terminal is authorized to send a message on another transmission channel (column 4, lines 40-46).

**Claim 35**

The application (page 1, paragraph 5) mentions UMTS in the description of the related art. A UMTS comprehend several base stations.

**Claim 36**

A mobile terminal selecting a transmission channel for transmission of messages from the mobile terminal to a base station, comprising: a processor generating a send authorization request signal for a specific transmission channel (column 3, lines 30-36) and decoding a response signal sent by the base station to detect a first decision value indicating whether the mobile terminal is authorized to send a message on the specific transmission channel (column 3, 40-46), said decoding device, upon detection of a first decision value indicating refusal of authorization to send the message on the specific transmission channel, analyzing the response signal to determine whether a second decision value is included therein authorizing the mobile terminal to send the message on another transmission channel (column 2, lines 19-23) and indicating which other transmission channels are available (column 4, lines 49-50); and a transceiver unit sending the message to the base station on one of the transmission channels available (column 5, lines 53-57).

Art Unit: 4172

### Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure (Hunt, US 6,925,561, discloses a radio communication system in which the base station answer a preamble with an ACK or a NACK. Mousley, US 6,708,037, discloses broadcasting a message with information about the available channels. Lee, US 6,490,453, discloses a channel assignment with two or more base stations. Fasulo, US 5,742,639, discloses a mobile terminal comprising a processor and a transceiver.)

Any inquire concerning this communication or earlier communications from the examiner should be directed to Marisol Fahnert, whose telephone number is 571 270 7512. The examiner can normally be reached on Monday-Friday 7:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lewis West can be reached on 571 272 7859.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published application may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866 217 9197.

/MARISOL FAHNERT/  
Examiner, Art Unit 4172

/Lewis G. West/  
Supervisory Patent Examiner, Art Unit 2618